



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Anthony L. Priborsky; Confirmation No. 8554
Robert B. Wood
Serial No.: 10/608,252
Filed: June 27, 2003 Customer No.: 28863
Examiner: Horace L. Flournoy
Group Art Unit: 2189
Docket No.: 1081-075US01/STL11196
Title: ASSIGNMENT OF QUEUE EXECUTION MODES USING TAG VALUES

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants respectfully request a Pre-Appeal Brief Request for Review in the above-referenced application. It is Applicants' position that the Examiner has failed to establish a *prima facie* case of obviousness of claims 1, 3, 5, 7, 9-11 and 18-24 under 35 U.S.C. §103(a) in the Office Action dated October 3, 2006. For this reason, Applicants respectfully submit that the rejection under 35 U.S.C. §103(a) is improper and must be reversed. Applicants do not assert that these are the only errors that the Examiner has made, nor do Applicants waive any arguments that may be asserted in an Appeal Brief.

Claim Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1, 3, 5, 7, 9, 10, 11, and 18-24 under 35 U.S.C. 103(a) as being unpatentable over Larson (USPN 6,321,233) in view of Chan et al. (USPN 5,822,772). The Examiner also rejected claim 19 under 35 U.S.C. §103(a) as being unpatentable over Larson in view of Chan and in further view of Snyder, II (USPN 6,189,083), claim 20 over Larson in view of Chan and in further view of Ng (USPN 5,341,351), claim 21

over Larson in view of Chan and in further view of Hoang et al. (USPN 6,026,469), claim 22 over Larson in view of Chan and in further view of Zuravleff et al. (USPN 5,737,547) and claim 24 over Larson in view of Chan and in further view of Morrow (USPN 2003/0046472).

Applicant respectfully traverses the rejections. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

The applied references fail to collectively disclose all of the elements recited in either independent claim 1 or independent claim 18.

As a preliminary matter, Applicant points out the Examiner's mischaracterization of Larson as applied in each of the rejections. As stated in Applicant's response to the Office Action dated October 3, 2006, Larson does not teach designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag as recited in claim 1 (a similar limitation is recited in independent claim 18). Instead, Larson teaches in FIG. 4 that the separation of requests into separate inputs: "read requests (in)" and "write requests (in)", occurs before age tags are created in write age FIFOs 66 and 68. Because read and write commands are already separate by the time age tags are created, the age tags could not possibly designate which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag as claimed. In Larson, only the location of a data access command is used to designate whether a command in a read command or a write command. For at least this reason, the Examiner has failed to provide a *prima facie* case of obviousness as required to properly support the rejection under 35 U.S.C. §103(a). The rejection is discussed in greater detail with respect to each of the rejected claims below.

Claims 1, 3, 5, 7, 9, 10 and 11

Independent claim 1 recites a method comprising (a) assigning a unique tag for each of several data access commands, and (b) designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag. Larson and Chan collectively fail to disclose designating which of a plurality of queue

execution modes to use for a selected one of the data access commands based on the selected command's tag, as recited in claim 1.

The Examiner indicated that Larson at column 9, lines 64-67 and column 10, lines 1-5 discloses designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag. However, in column 9, lines 64-67 and column 10, lines 1-5, Larson merely discloses the use of a tag to determine "the relative age of the pending read and write requests." To the extent Larson differentiates between read tags and write tags, their locations, not age tags are used to differentiate between them. Importantly, Larson fails to provide any indication that an age tag may be used to designate which of a plurality of queue execution modes to use.

For example, in reference to FIG. 3 of Larson, request reception circuitry 94 separates read and write requests to be stored in separate FIFOs 62 and 64 (FIG. 4) of request queue 92.¹ As shown in FIG. 4, the separation of requests into separate inputs: "read requests (in)" and "write requests (in)", occurs before age tags are created in write age FIFOs 66 and 68. In Larson, the location of a request, not a tag, is used to distinguish between read and write requests. Tags are merely used to distinguish the relative age of pending read and write requests.² For at least this reason, Larson fails to disclose designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag as recited by claim 1.

The Examiner has not asserted that Chan discloses or suggests designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag. Indeed, Applicant finds no support for such a feature in Chan.

Because Larson and Chan each fails to disclose or suggest designating which of a plurality of queue execution modes to use for a selected one of the data access commands based on the selected command's tag, the combination of Larson and Chan would not have made the subject matter of claim 1 obvious at the time of the Applicant's invention.

Dependent claims 3, 5, 7, 9, 10 and 11 are patentable over the applied references for at least the reasons independent claim 1 is allowable over the applied references. In light of the

¹ Larson, column 5, lines 14-16.

² Larson, column 5, lines 22-26.

clear differences between the applied references and the invention as claimed in claim 1, Applicant reserves further comment with respect to dependent claims 3, 5, 7, 9, 10 and 11. Applicant request withdrawal of the rejection of claims 1, 3, 5, 7, 9, 10 and 11.

Claims 18-24

Independent claim 18 recites an electromechanical device comprising “a controller configured to determine which of a plurality of queue execution modes to use for a selected one of the pending data access commands based on the selected command’s tag.” For similar reasons as discussed with respect to claim 1, Larson and Chan fail to teach or suggest a controller configured to determine which of a plurality of queue execution modes to use for a selected one of the pending data access commands based on the selected command’s tag. For example, in contrast to the invention as recited in claim 18, Larson discloses distinguishing between read and write requests prior to assigning an age tag to a request.

Dependent claims 19-24 are patentable over the Larson and Chan for at least the reasons independent claim 18 is allowable over the cited Larson and Chan. Furthermore, the additional references applied in the rejections of claims 19-22 and 24 fail to overcome the deficiencies of Larson and Chan with respect to claim 18. In light of the clear differences between the applied references and the invention as claimed in claim 18, Applicant reserves further comment with respect to dependent claims 19-24. Applicant request withdrawal of the rejection of claims 18-24.

For at least these reasons, the Examiner has failed to establish a prima facie case for non-patentability of Applicant’s claims 1, 3, 5, 7, 9, 10, 11, and 18-24 under 35 U.S.C. §103(a). Withdrawal of this rejection is requested.

CONCLUSION

For at least the reasons stated above, all rejections are improper and must be reversed. By setting forth the clear grounds of error, Applicant does not assert that these are the only errors that the Examiner has made, nor does Applicant waive any arguments that may be asserted in an Appeal Brief.

Applicant requests a review and a panel decision that promptly resolves the issues in Applicants' favor and eliminates the need for an Appeal Brief.

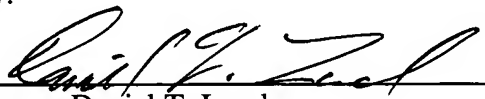
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Date:

By:

March 5, 2007

SHUMAKER & SIEFFERT, P.A.
1625 Radio Drive, Suite 300
Woodbury, Minnesota 55125
Telephone: 651.735.1100
Facsimile: 651.735.1102


Name: Daniel T. Lund
Reg. No.: 58,614